

# ALLOCATING STUDENT ENROLLMENTS

### **Overview**

The Higher Education Coordinating Board needs to make specific enrollment allocation recommendations to carry out the intent of the 2004 Strategic Master Plan for Higher Education. The shape and size of the state's higher education system is of primary concern for decision makers looking to optimize state resources.

Issues that will influence discussions of the "shape and size" of the system and the board's specific enrollment recommendations include:

- The division of resources among the public two-year and four-year colleges and universities;
- The allocation of new resources and enrollments among the main campuses, branch campuses, and off-site learning centers;
- The role of private colleges and universities in meeting the state's need for additional higher education capacity;
- · The regional economic, educational, and programmatic needs; and
- The methods of program delivery, such as traditional instruction, 2+2 programs for transfer students, and technology-enhanced distance learning.

### Analysis

Allocating student enrollment to meet the board's goals requires answers to the following questions:

- · How many degrees will students earn in the public and private sectors?
- How many public sector enrollments are needed to meet the public sector goals?
- · How does this differ from current enrollments?
- What is the current physical capacity of the public colleges and universities?
- What is the regional demand for additional student enrollments?
- What are the funding needs for the additional student enrollments?

The answer to each question has ramifications for the others. The board is constructing a simulation model to help state policy makers analyze the fiscal impact of various enrollment, tuition, financial aid, state support, and capital facilities alternatives.

The board has set three specific targets for the number of degrees that students will earn at Washington's public and private colleges and universities by 2010: 11,500 graduate degrees, 30,000 bachelor's degrees, and 27,000 associate degrees.

1 The HECB updated this goal based on more current data in December 2004.





## Overall Number of Degrees to Be Earned In 2010 at Public And Private Colleges and Universities

Graduate Degrees	11,500
Bachelor's Degrees	30,000
Associate Degrees <sup>1</sup>	27,000

In addition, the board has set a target of 25,000 per year for the number of students who will complete job training programs ("Prepared for Work") in the community and technical college system.<sup>2</sup> The board also has set a target of 20,525 by 2010 for the number of students in adult basic education and English as a Second Language programs who demonstrate improved literacy skills.

The following steps are examples and not the final analysis. As the board makes specific recommendations, these calculations will become more specific.

Number of Degrees to be Earned in 2010 by the Public and Private Sectors Based on Their Historical Shares				
	Public	Public	Private	Private
	Share	Goal	Share	Goal
Graduate Degrees (11,500) Bachelor's Degrees (30,000) Associate Degrees (27,000)	57%	6,555	43%	4,945
	76%	22,800	24%	7,200
	96%	25,800	4%	1,200

Step 1: How many degrees will students earn in the public and private sectors?

A system of higher education that sets goals for degrees earned must include both the public and private sectors. This is the initial step in shaping higher education in Washington State. The board assumes that the public and private sectors will grow at the same rates between now and 2010 and that their historical shares will remain the same. For example, the board assumes that the public colleges will continue to produce 57 percent of all graduate degrees, which translates into 6,555 graduate degrees annually in 2010.

The goal for the number of students who will complete job training programs will occur entirely in the public sector as will the goal for adult literacy.

<sup>2</sup> The goal of "Prepared for Work" is not exclusively a degree goal. It includes certificates and/or a certain number of job training courses, in addition to technical associate degrees.



<sup>1</sup> Includes both academic and technical associate degrees.

165,100



## Step 2: How many public sector enrollments are needed to meet the public sector goals?

Determining the number of annual full-time student enrollments (FTE) needed to reach the board's public sector goals requires comparing the number of students enrolled today with the number of degrees earned.

Although the number of degrees earned per FTE student varies by institution, the example below uses the average for the four-year public sector. In addition, it does not change the current ratio of degrees earned to enrolled students and does not incorporate any new "efficiencies" in how many students it takes to produce a degree.

Meeting the Goal of Degrees to be Earned by 2010: Student Enrollments (FTE) Needed at the Public Four-Year Colleges and Universities			
	Public Degree Goal	Number of Actual FTE Students Per Degree	Annual FTE Enrollments
Graduate Degrees Bachelor's Degrees Total	6,555 22,800	3.05 3.73	19,993 85,044 105,037

To meet the public degree goal of 22,800 bachelor's degrees and 6,555 graduate degrees per year will require 105,000 annual student enrollments (FTE) by 2010.

In the public two-year system, there is an overlap in the associate of arts degree and Prepared for Work goals. Some of the Prepared for Work students earn associate degrees. The associate degree goal of 25,800 needs to be divided between the transfer-oriented academic associate degree and the technical associate degree.

Producing 17,000 students with academic associate degrees, 25,000 students who are prepared for work (which includes another 8,800 associate degrees), and 20,525 students with improved adult literacy skills will require 165,100 FTE students.

Meeting the Community and Technical College Goals: Student Enrollments (FTE) Needed at the Public Two-Year Colleges				
	Goal	Actual FTE By Course Per Outcome	Annual FTE Enrollments	
Associate Degrees - Academic Prepared for Work	17,000 25,000	4.00 2.90	68,000 72,500	
Adult Literacy	20,525	1.20	24,600	



**Total** 



#### Step 3: How does this differ from current enrollments?

Meeting these degree goals will require about 42,000 more students than are currently enrolled in the state's public higher education system or about 54,000 more enrollment slots than are budgeted for 2004-05. The total number of public FTE students required to meet the strategic master plan goals is about 270,000. During the 2003-04 academic year, about 228,000 FTE students were enrolled. The number of FTE student slots budgeted for the 2004-05 academic year is 216,500.<sup>3</sup>

Meeting the Goal of Degrees to be Earned by 2010: Additional Student Enrollments (FTE) Needed at the Public Colleges and Universities					
	2003-04 (Actual)	2004-05 (Budgeted)	Goal for 2010	Over 2003-04 (Actual)	Over 2004-05 (Budgeted)
Four Year Colleges and Universities	00.075	97.620	105.007	14.060	17 000
Two Year Colleges	90,075 138,241	87,639 128,885	105,037	14,962 26,859	17,398 36,215
Total	228,316	216,524	270,137	41,821	53,613

Step 4: What is the current physical capacity of the public colleges and universities?

Each college or university has constraints on its capacity based on its physical limitations or its institutional strategic plan.

As of 2002, the planned capacity (by 2010) and institutional strategic plans indicate that the four-year colleges and universities in total will have enough classroom and lab space to accommodate 120,000 students – nearly 30,000 more FTE students than were enrolled in 2003-04. This compares favorably to the enrollment growth of 15,000 needed to meet the board's goal for the number of degrees earned. Some of these spaces are programmatically unfit and will require modernization. Additionally, enrollment growth at the existing four-year campuses will require creating new instructional support and student service space. And the location of much of the additional space (eastern Washington) may not match the growth areas of the state (the Puget Sound region).

3 This includes nearly 3,000 FTE students that were added in the 2004 Supplemental Operating Budget.





Planned capacity at the two-year colleges is 92,600 student FTE enrollments by 2010. Actual enrollment in 2003-04 is 138,000, which suggests that the system is already "overcapacity" by about 45,000 students. The two-year system is currently accommodating the extra students in crowded spaces or using other spaces that are neither owned nor leased. Meeting the goals would require providing capacity for an additional 26,000 student FTEs in the two-year system by 2010.

#### Step 5: What is the regional demand for additional student enrollments?

A systematic approach to enrollment allocation will require distributing the enrollment slots among the individual colleges and universities. This allocation must take into account not only the capacity issue described above but also the geographic and programmatic needs of students and the state's economy.<sup>4</sup>

#### Step 6: What are the funding needs for the additional student enrollments?

There are a number of issues to consider when funding additional students, such as whether the funding should be allocated according to the average cost per student, the marginal cost per student, or the funding level of similar colleges and universities in other states (peer averages). In addition, "high-demand" enrollment slots, which generally are more expensive, have been funded historically at higher amounts than "general" enrollments. Finally, there are funding differences among the sectors (research universities, comprehensive universities, and community and technical colleges) and between undergraduate and graduate level enrollments.

All of the six action steps outlined above require data collection, analysis, and cost projections.

## Implementation Plan

#### Recommendations

*In October 2004, the HECB* adopted 2005-07 budget recommendations and submitted them to the governor and legislature. These recommendations were based on how the institutions' requests align with the board's budget priorities, the missions of the institutions, and the goals of the statewide strategic master plan. The recommendations also addressed the first biennium objectives of the master plan.

4 Review the board's "Meeting Regional Higher Education Needs" proposal for more detail about this analysis.





**Every two years thereafter**, the HECB will include its enrollment allocation and funding proposals in its biennial higher education recommendations to the governor and legislature. (Tuition, financial aid, and the costs of other proposals are addressed in other implementation plans and cost estimates.)

*In the long-term,* annual enrollment allocation decisions should be consistent with strategies outlined in the board's other policy proposals, specifically "Increasing the number of degrees in high-demand fields" and "Meeting regional higher education needs."

#### Performance measures

Determining whether resources are allocated in an optimal manner will require the state to quantify: (1) the actual number of degrees produced; (2) the average number of student credit hours attempted per degree by sector; (3) the cost per student credit hour in each sector of the state system; and (4) the difference between budgeted and actual enrollments at the public colleges and universities.

#### Estimated costs

- Increasing enrollments to meet the board's degree goals will require additional state resources. The exact amount will depend on how many additional students are needed and the cost per student.
- Costs for 2005-07 are presented in the board's 2005-07 budget recommendations.

#### Example of ongoing related work

The 2004 supplemental operating budget directed the HECB to develop a simulation model to analyze the impacts and costs of various higher education policy alternatives. The policy model is to examine the interaction between higher education demand, funding resources, and institutional capacity. This model, completed in December 2004, also will be useful in allocating student enrollments and estimating the fiscal impacts of various policy options in future biennia.

